I CLAIM:

~1	A woo	dworking	machine	compris	ing

an electrically conductive cutter;

a detection system adapted to detect confact between a user and the cutter; and

a brake system adapted to engage and stop the cutter when the detection system detects contact between the user and the cutter

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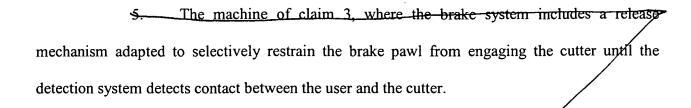
2. The machine of claim 1, where the detection system is adapted to capacitively impart an electric signal on the eatter and to detect the occurrence of a determined change in the signal.

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The machine of claim 1, where the brake system includes a brake pawl biased to engage at least a portion of the cutter to stop the cutter.

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4. The machine of claim 3, where the brake system includes a spring configured to move the brake pawl into the cutter.



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The machine of claim 5, where the release mechanism includes a fuse wire 6. that is melted upon detection of contact between the user and the cutter.

The machine of claim 1, where at least a portion of the brake system is housed in a replaceable cartridge.

8. The machine of claim 1, where the cutter is adapted to move away from the user when the brake system engages the cutter.

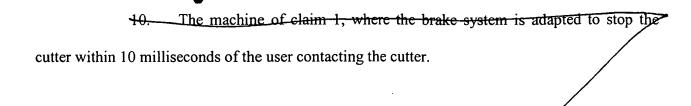
9. The machine of claim 1, where the detection system is adapted to detect contact between the user and the cutter within 100 microseconds of the user contacting the cutter.

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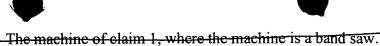
- 11. The machine of claim 1, where the brake system is adapted to stop the cutter within 5 milliseconds of the user contacting the cutter.
 - 12. The machine of claim 1, where the machine is a table saw.
 - 13. The machine of claim 1, where the machine is a miter saw.
 - 14. The machine of claim 1, where the machine is a radial arm saw.
 - 15. The machine of claim 1, where the machine is a circular saw.

. The machine of claim 1, where the machine is a jointer.

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18. A woodworking machine comprising: an electrically conductive cutter;

a detection system adapted to detect contact between a person and the cutter, where the detection system is adapted to capacitively impart an electric signal on the cutter, and to detect the occurrence of a determined change in the electric signal on the cutter; and

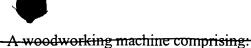
a reaction system associated with the detection system and the cutter, where the reaction system is adapted to cause a predetermined action to take place relative to the cutter upon detection of contact between the person and the cutter by the detection system.

19. A safety system for machines, the safety system comprising:

a detection system adapted to detect contact between a person and a working portion of a machine, where the detection system is adapted to capacitively impart an electric charge on the working portion and to detect when that charge drops; and

a reaction system associated with the detection system to cause a predetermined action to take place relative to the working portion upon detection of contact between the person

and the working portion by the detection system.



a working portion;

a detection system adapted to detect a dangerous condition between a person and the working portion;

a reaction system associated with the detection system to cause a predetermined action to take place upon detection of the dangerous condition; and

a control system adapted to control the operability of one or more of the working portion, the detection system and the reaction system.

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